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Claim 7 has been amended to improve language.

Claim 8 has been amended to clarify language and to correct the claim dependency.

No new subject matter has been added. Claims 1 and 3-8 remain.

The Examiner has rejected claims 1, 3, 4, and 6-8 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,901,971 issued to Speas1. Speas1 teaches a system for allowing remote sensing of the internal environmental characteristics of transportable containers. The main purpose is to monitor the inside of sealed containers (e.g. SMIF Smart Pods) carrying high-tech devices such as semiconductor wafers in order to ensure that dust and moisture do not enter the container, in other words to ensure that wafers are transported in a clean environment. Speas1 is not concerned with the monitoring the environmental conditions undergone by the container, only with monitoring the environmental conditions undergone by the contents of the container. In contrast, the device of claim 1 of the present application allows the monitoring of conditions undergone by an article itself within an industrial process by monitoring external environmental conditions acting on the device, and hence on the articles. Examples given within the description include devices shaped like eggs, cans, and bottles, and by placing such devices alongside actual eggs, cans, and bottles, the environmental conditions undergone by actual eggs, cans, and bottles during regular industrial processing can be monitored. This difference is seen more clearly by examining the elements of the claims.

The preamble of claim 1 states that the claimed device is for use in actively detecting, capturing, and reporting environment conditions to which a plurality of articles are subjected. If Speas1 teaches this, then the articles of interest are be the high-tech devices within the container 200, as it is the high-tech devices for which environmental conditions are monitored in order to ensure that they remain within a clean environment during transportation.

Claim 1 includes an enclosure designed to emulate the physical configuration of articles of interest. This is an element not taught by Speas1. Speas1 teaches at most a container which contains the articles of interest, where the article of interest is the high-tech device such as the semiconductor wafer.

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teach this limitation. When discussing present claim 3, the Examiner has suggested that Wallace teaches a similar limitation by stating that "the sensor units [of Wallace are used] to monitor conditions in food receptacles 110 indicating the shape would inherently be such that it mimics containers for storage in such a receptacle." The Applicant cannot agree with this statement. At column 9 lines 18-20, Wallace states "The monitoring system 14 includes a plurality of sensor units 20 disposed on or adjacent to food receptacles 110" (emphasis added). Wallace therefore clearly teaches merely that the sensor units are placed next to the food receptacles, which is all that is needed when monitoring the temperature of food items in a food service facility, and in no way teaches the sensor unit having an enclosure designed to emulate the physical configuration of the articles of interest during industrial processing.

The device of claim 3 includes the limitation that the shape of the enclosure is designed to replicate the articles in respect of at least one of shape, surface texture, surface physical properties, and mass distribution so as to enable embedding of the device with the articles without disrupting or altering the industrial process under measurement. As discussed above, this is a limitation not taught by Wallace, and in fact Wallace is not concerned with industrial processes and therefore has no interest in teaching this limitation.

The device of amended claim 4 includes threaded retaining means providing sealed engagement between two enclosure portions. The Examiner has stated that an upper portion and a lower portion of the sensor unit of Wallace are sealingly engaged via the walls of the unit, which the Applicant respectfully submits is now moot in view of the amendments to claim 4.

Claims 3 and 4 are also dependent on claim 1, and include all of the limitations of claim 1 discussed above. Claims 5 and 6 are also dependent on claim 1, and include all of the limitations of claim 1 discussed above. Since Wallace does not teach each and every element of claims 1 and 3-6, the Applicant respectfully submits that these claims are not anticipated by Wallace.

The Examiner has rejected claim 4 under 35 U.S.C. §112 as being indefinite for missing language. Claim 4 has been amended and now reads complete.

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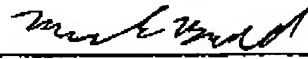
The Examiner has rejected claim 5 under 35 U.S.C. §112 as being unclear as to what "retaining means" provide the sealed engagement. The Applicant assumes the Examiner is referring to claim 4, which introduces the retaining means. Claim 4 has been amended to clarify the retaining means and their interaction with the enclosure portions.

The Examiner has rejected claim 5 under 35 U.S.C. §112 as being unclear as to how the printed circuit boards are related to the device of earlier claims, and as to how the printed circuit boards are soldered at angles to each other. Claim 5 has been amended to clarify how the PCBs are related to the device, and to remove the limitation that they are soldered at angles to each other.

The Examiner has rejected claim 8 35 U.S.C. §112 as being unclear as to the term "axe". Claim 8 has been amended to correct this term.

In view of the foregoing, it is believed that the claims as amended herein are in condition for allowance. Reconsideration and action to this end is respectfully requested.

Respectfully submitted,



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